

I claim:

1. A device for delivering an expandable prosthesis in a body lumen comprising:  
an elongate body having a distal end a lumen therethrough; and  
an expandable sheath releasably attached to the distal end of the body, the sheath  
5 having a distal opening and a lumen therethrough, the sheath further configured to receive an  
expandable prosthesis.
2. The sheath of claim 1 wherein the releasable attachment comprises an adhesive  
calibrated to detach from the elongate body when a sufficient expansion force is applied to the  
sheath by the expandable prosthesis.
3. The sheath of claim 1 wherein the releasable attachment comprises a  
circumferential perforation configured to detach from the elongate body when a sufficient  
expansion force is applied to the sheath by the expandable prosthesis.
4. The sheath of claim 1 further comprising perforations to allow blood porosity and  
to enhance distensability.
5. The expandable prosthesis of claim 1 comprising a stent.
6. The expandable prosthesis of claim 1 comprising a coil.
7. The sheath of claim 1 further comprising perforations to allow blood porosity and  
to enhance distensability.
8. A detachable prosthesis cover comprising:  
a tubular member; and  
a generally tubular sheath having a lumen therethrough and a proximal region of  
the sheath circumferentially surrounding a distal end of the tubular member, the sheath  
configured to capture a prosthesis delivered into the lumen and separate from the tubular  
member.
9. The prosthesis of claim 7 comprising a stent.
10. The expandable prosthesis of claim 7 comprising a coil.

11. The sheath of claim 7 further comprising perforations to allow blood porosity and to enhance distensability.

12. A method of delivering a prosthesis comprising:

providing a delivery system comprising a tubular member, a tubular sheath  
5 releasably affixed to the tubular member, a prosthesis, and an actuator for deploying the prosthesis;

advancing a distal end of the tubular member through a body vessel to a position within a human body; and

deploying the prosthesis such that the sheath is positioned between the prosthesis and a vessel wall while maintaining a patent fluid path through the vessel.

13. The method of claim 11 further comprising detaching the sheath from the tubular member as the prosthesis is deployed.

14. The method of claim 11 wherein the prosthesis is deployed in an aneurysm.

15. The method of claim 13 wherein the prosthesis is deployed in an aneurysm neck.